AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) Apparatus comprising:

an image source to produce along a common optical axis at least first and second complementary images ~~spatial image fractions, at least a significant portion of said first image fraction not spatially overlapping any portion of said second image fraction~~;

relay optics having a relay optics field of view associated with said images ~~image fractions~~; and

a redirecting unit coupled to said image source to direct at least said first and second images ~~image fractions~~ to at least first and second, respective, spatial regions of a reflecting unit, thereby to enable viewing at least said first and second images ~~image fractions~~ together as an ~~being integrated into a substantially spatially continuous~~ integrated image having a field of view wider than said relay optics field of view.

2. (Previously Presented) The apparatus of claim 1, wherein said reflecting unit comprises diffractive optics formed therein.

3. (Previously Presented) The apparatus of claim 2 wherein said diffractive optics comprises binary optics.

4. (Previously Presented) The apparatus of claim 1 wherein said reflecting unit comprises diffractive optics on its inner and outer faces so to create a total zero optical power for the outer scene.

5. (Currently Amended) The apparatus of claim 1 wherein the number of said images ~~fractions~~ is at least two.

6. (Currently Amended) The apparatus of claim 1, wherein said images ~~fractions~~ are of different wavelength.

7. (Currently Amended) The apparatus of claim 1, wherein the number of said images ~~fractions~~ is at least two.

8. (Original) The apparatus of claim 1, wherein said redirecting unit comprises a controllable tilting mirror.

9. (Currently Amended) The apparatus of claim 1, wherein said redirecting unit comprises a polarization selective ~~polarized~~ reflecting device.

10. (Currently Amended) A helmet comprising:

a reflecting unit with operative connection to said helmet;

an image source to produce along a common optical axis at least first and second complementary images ~~spatial image fractions, at least a significant portion of said first image fraction not spatially overlapping any portion of said second image fraction~~;

relay optics having a relay optics field of view associated with said images ~~image fractions~~; and

a redirecting unit coupled to said image source to direct at least said first and second images ~~image fractions~~ to at least first and second, respective, spatial regions of said reflecting unit, thereby to enable viewing at least said first and second images ~~image fractions~~ together as an ~~being spatially integrated into a substantially spatially continuous~~ integrated image having a field of view greater than said relay optics field of view.

11. (Previously Presented) The helmet of claim 10, wherein said reflecting unit comprises diffractive optics formed therein.

12. (Previously Presented) The helmet of claim 11, wherein said diffractive optics comprises binary optics.

13. (Previously Presented) The helmet of claim 10 wherein said reflecting unit comprises diffractive optics on its outer faces so to create a total zero optical power for the outer scene.

14. (Currently Amended) The helmet of claim 10, wherein the number of said images ~~fractions~~ is at least two.

15. (Currently Amended) The helmet of claim 10, wherein said images ~~fractions~~ are of different wavelength.

16. (Currently Amended) The helmet of claim 10, wherein said images ~~fractions~~ are of different polarization.

17. (Currently Amended) The helmet of claim 10, wherein said redirecting unit comprises [[of]] a controllable tilting mirror.

18. (Currently Amended) The helmet of claim 10, wherein said redirecting unit comprises a polarization selective ~~polarized~~ reflecting device.

19. (Currently Amended) A method for producing a wide field of view ~~FOV~~, said method comprising:

producing along a common optical axis at least first and second complementary images ~~spatial image fractions, at least a significant portion of said first image fraction not spatially overlapping any portion of said second image fraction~~;

optically transferring said image fractions through relay optics having a relay optics field of view; and

directing at least said first and second images ~~image fractions~~ to at least first and second, respective, spatial regions of a reflecting unit~~, thereby~~ to enable viewing at least said first and second images ~~image fractions~~ together as ~~being integrated into~~ [[a]] an ~~substantially spatially continuous~~ integrated image having a field of view wider than said relay optics field of view.

20. (Previously Presented) The apparatus of claim 2 wherein said diffractive optics comprises holograms.

21. (Previously Presented) The apparatus of claim 2 wherein said diffractive optics comprises optic-powered implemented optics.

22. (Previously Presented) The helmet of claim 11 wherein said diffractive optics comprises holograms.

23. (Previously Presented) The helmet of claim 11 wherein said diffractive optics comprises optic-powered implemented optics.

24. (New) The apparatus of claim 1, wherein said redirecting unit comprises a wavelength selective reflecting device.

25. (New) The apparatus of claim 1 wherein said at least said first and second complementary images are substantially non-overlapping.

26. (New) The apparatus of claim 1 wherein said image source is able to sequentially produce said first and second complementary images.

27. (New) The helmet of claim 10, wherein said redirecting unit comprises a wavelength sensitive reflecting device.

28. (New) The helmet of claim 10 wherein said at least said first and second complementary images are substantially non-overlapping.

29. (New) The helmet of claim 10 wherein said image source is able to sequentially produce said at least first and second complementary images.

30. (New) The method of claim 19, wherein directing said images to said spatial regions of the reflecting unit comprises directing said images to said spatial regions of the reflecting unit based on polarization of said images.

31. (New) The method of claim 19, wherein directing said images to said spatial regions of the reflecting unit comprises directing said images to said spatial regions of the reflecting unit based on wavelength of said images.

32. (New) The method of claim 19 comprising sequentially producing said at least first and second complementary images.